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07/17/2003

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1. A system for preventing damage to media files within a digital camera, comprising:

- a power manager for detecting a power failure in said digital camera;
- an interrupt handler for responsively incrementing a powerfail counter for incrementally recording the number of instances of power failure following said power failure; and
- a memory driver for performing a memory access operation and subsequently evaluating said powerfail

counter to determine whether said power failure occurred during said memory access operation;

said memory driver repeating said memory access operation whenever said memory driver determines that said power failure occurred during said memory access operation.

2. The system of claim 1 wherein said memory driver: evaluates said powerfail counter prior to performing said memory access operation to obtain a pre-operation value;

evaluates said powerfail counter subsequent to performing said memory access operation to obtain a post-operation value;

compares said pre-operation value and said post-operation value; and

repeats said memory access operation if said memory driver determines that said pre-operation value and said post-operation value are different.

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3. The system of claim 1 wherein said interrupt handler registers selected service routines and transmits a notification of said power failure to said registered service routines.

4. The system of claim 1 wherein a processor performs a powerdown sequence to preserve said media files within said digital camera when a power failure is detected.

5. The system of claim 1 further comprising a voltage sensor for monitoring a power supply to provide said power manager with the power supply voltage value.

6. A method for preventing damage to media files within a digital camera, comprising the steps of:

- detecting a power failure within said digital camera;
- incrementing a powerfail counter for incrementally recording the number of instances of power failure in response to said power failure;
- evaluating said powerfail counter before and after performing a memory access operation to determine whether said power failure occurred during said memory access operation; and
- repeating said memory access operation whenever said evaluating step determines that said power failure occurred during said memory access operation.

7. The method of claim 6 wherein the steps of evaluating and repeating further include the steps of:

- evaluating said powerfail counter prior to performing said memory access operation to obtain a pre-operation value;
- evaluating said powerfail counter subsequent to performing said memory access operation to obtain a post-operation value;
- comparing said pre-operation value and said post-operation value; and
- repeating said memory access operation if said memory driver determines that said pre-operation value and said post-operation value are different.

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8. The method of claim 6 further comprising the steps of registering service routines and transmitting a notification of said power failure to said registered service routines using an interrupt handler.

9. The method of claim 6 further comprising the steps of performing a powerdown sequence to preserve said media files within said digital camera when a power failure is detected, whereby data within said digital camera is protected.

10. The method of claim 6 further comprising the steps of monitoring a power supply and responsively providing the power supply voltage value using a voltage sensor.

11. A computer-readable medium comprising program instructions for preventing damage to media files within a digital camera by performing the steps of:

- detecting a power failure within said digital camera;
- incrementing a powerfail counter for incrementally recording the number of instances of power failure in response to said power failure;
- evaluating said powerfail counter before and after performing a memory access operation to determine whether said power failure occurred during said memory access operation; and
- repeating said memory access operation whenever said evaluating step determines that said power failure occurred during said memory access operation.

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12. The computer-readable medium of claim 11 wherein the steps of evaluating and repeating further include the steps of:

- evaluating said powerfail counter prior to performing said memory access operation to obtain a pre-operation value;

- evaluating said powerfail counter subsequent to performing said memory access operation to obtain a post-operation value;

- comparing said pre-operation value and said post-operation value; and

- repeating said memory access operation if said memory driver determines that said pre-operation value and said post-operation value are different.

13. The computer-readable medium of claim 11 further comprising the steps of registering service routines and transmitting a notification of said power failure to said registered service routines using an interrupt handler.

14. The computer-readable medium of claim 11 further comprising the steps of performing a powerdown sequence and a subsequent restart sequence after detecting said power failure, whereby said media files within said digital camera are protected.

15. The computer-readable medium of claim 11 further comprising the steps of monitoring a power supply and responsively providing the power supply voltage value using a voltage sensor.

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16. A system for preventing damage to media files within a digital camera, comprising:

- means for detecting a power failure within said digital camera;
- means for incrementing a powerfail counter for incrementally recording instances of power failure in response to said power failure;
- means for evaluating said powerfail counter before and after performing a memory access operation to determine whether said power failure occurred during said memory access operation; and
- means for repeating said memory access operation whenever said means for evaluating determines that said power failure occurred during said memory access operation.

17. The system of claim 16 wherein said means for evaluating and repeating further include means for:

- evaluating said powerfail counter prior to performing said memory access operation to obtain a pre-operation value;
- evaluating said powerfail counter subsequent to performing said memory access operation to obtain a post-operation value; comparing said pre-operation value and said post-operation value; and
- repeating said memory access operation if said memory driver determines that said pre-operation value and said post-operation value are different.

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18. The system of claim 16 further comprising means for registering service routines and transmitting a notification of said power failure to said means for registering service routines.

19. The system of claim 16 further comprising the means for performing a powerdown sequence and a subsequent restart sequence after detecting said power failure, whereby said media files within said digital camera are protected.

20. The system of claim 16 further comprising means for monitoring a power supply and responsively providing the power supply voltage value using a voltage sensor.

21. (New) A system for preventing damage to media files within a digital image capture device, comprising:

- a sensor for detecting a power loss in the digital image capture device; and
- a processor coupled to the sensor for performing memory access operations, the processor adapted to repeat a memory access operation in response to determining that the sensor detected a power loss during the memory access operation.

22. (New) The system of claim 21, further comprising:

- a counter adapted to maintain a power loss count in response to the sensor, wherein the processor determines that the sensor detected a power loss by evaluating a counter.

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23. (New) The system of claim 22, wherein the counter increments each time a power loss occurs in the system.

24. (New) The system of claim 21, wherein the processor performs a powerdown sequence in response to determining that the sensor detected a power loss to preserve the media files within the digital image capture device.

25. (New) A method of preventing damage to media files within a digital image capture device, the method comprising:

detecting a power loss in the digital image capture device during a memory access operation to a media file; and  
repeating the memory access operation to the media file.

26. (New) The system of claim 25, further comprising determining if the power loss occurred during a memory access operation by evaluating a counter.

27. (New) The system of claim 26, further comprising incrementing the counter each time a power loss occurs in the system.

28. (New) The system of claim 25, further comprising performing a powerdown sequence to preserve the media files within the digital image capture device.

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29. (New) A computer-readable medium having stored thereon instructions which, when executed by a processor in a system for preventing damage to media files within a digital image capture device, cause the processor to perform the operations of:

detecting a power loss in the digital image capture device during a memory access operation to a media file; and  
repeating the memory access operation to the media file.

30. (New) The computer-readable medium of claim 29, further comprising determining if the power loss occurred during a memory access operation by evaluating a counter.

31. (New) The computer-readable medium of claim 30, further comprising incrementing the counter each time a power loss occurs in the system.

32. (New) The computer-readable medium of claim 29, further comprising performing a powerdown sequence to preserve the media files within the digital image capture device.

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